[CLAIMS]

[Claim 1] An image coding method for coding an input image, the method comprising:

converting, into a bin string, an offset value used in an offset process to be applied to a pixel value of a reconstructed image corresponding to the input image; and

performing bypass arithmetic coding on the bin string using a fixed probability.

[Claim 2] An image decoding method for decoding a coded image, the method comprising:

performing bypass arithmetic decoding on a bin string using a fixed probability, the bin string being coded and indicating an offset value used in an offset process to be applied to a pixel value of a reconstructed image corresponding to the coded image; and

converting, into the offset value, the bin string on which the bypass arithmetic decoding is performed.

[Claim 3] An image coding apparatus that codes an input image, the apparatus comprising

a control circuit and storage electrically connected to the control circuit,

wherein the control circuit executes:

converting, into a bin string, an offset value used in an offset process to be applied to a pixel value of a reconstructed image corresponding to the input image; and

performing bypass arithmetic coding on the bin string using a fixed probability.

[Claim 4] An image decoding apparatus that decodes a coded image, the apparatus comprising

a control circuit and storage electrically connected to the control circuit,

wherein the control circuit executes:

performing bypass arithmetic decoding on a bin string using a

fixed probability, the bin string being coded and indicating an offset value used in an offset process to be applied to a pixel value of a reconstructed image corresponding to the coded image; and

converting, into the offset value, the bin string on which the bypass arithmetic decoding is performed.

[Claim 5] An image coding and decoding apparatus, comprising:

the image coding apparatus according to Claim 3; and

the image decoding apparatus according to Claim 4.

CLAIMS

1. An image decoding method for decoding a coded image, the method comprising:

performing, using a processor, bypass arithmetic decoding on a bin string using a fixed probability;

converting the decoded bin string into a sample adaptive offset value; and

applying, in a sample adaptive offset process, the sample adaptive offset value to a pixel value of a reconstructed image corresponding to the coded image.

2. An image decoding apparatus that decodes a coded image, the apparatus comprising

a control circuit and storage electrically connected to the control circuit,

wherein the control circuit executes:

performing bypass arithmetic decoding on a bin string using a fixed probability;

converting the decoded bin string into a sample adaptive offset value; and

adding, in a sample adaptive offset process, the sample adaptive offset value to a pixel value of a reconstructed image corresponding to the coded image.